REMARKS/ARGUMENTS

Claims 1-8, 13-20, and 25-30 are pending in the present application. Claims 9-12, 21-24, and 31-34 have been withdrawn.

This Amendment is in response to the final Office Action mailed March 31, 2005. In the final Office Action, the Examiner rejected claims 1-5, 8, 13-17, 20, 25-29 under 35 U.S.C. §103(a). In addition, the Examiner indicated allowable subject matter for claims 6-7, 18-19, and 30 if they are rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicants have amended claims 1, 5, 13, 15-17, and 25. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Claim Objections

1. The Examiner objects to claims 15-17 because of minor informalities. Applicants have amended claims 15-17 to correct the minor informalities regarding claim dependency.

Applicants respectfully request that the Examiner withdraw the objection to claims 3-5, 15-17, and 27-29.

Rejection Under 35 U.S.C. § 103

In the final Office Action, the Examiner rejected claims 1-5, 8, 13-17, 20, 25-29 under 35 U.S.C. §103(a). Applicants respectfully traverse the rejection and contend that the Examiner has not met the burden of establishing a prima facie case of obviousness.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *MPEP §2143, p. 2100-129 (8th Ed., Rev. 2, May 2004).* Applicants respectfully contend that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

1. Claims 1 and 13 are being rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,117,186 issued to Wydall et al. ("Wydall") in view of Official Notice. Wydall discloses a system and method for easy loading of cd-rom computer software without installation process. If the Operating System (OS) is Win95, then if the auto insert notification is enable, the OS runs the autorun.inf file that executes Win95.exe, if the auto insert notification is not enabled, then the user has to run Win3.1.exe(Wydall, col. 7, lines 14-22). Wydall does not disclose, suggest, or render obvious (1) configuring a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up, (2) detecting insertion of a medium into a drive based on the mode word, and (3) starting a program on the medium when the insertion is detected.

The Examiner states that Wydall discloses configuring a mode as auto insert notification (Final Office Action, page 3, item 6). Applicants respectfully disagree. The auto insert notification is a feature in the Windows 95 Operating System that allows the user to enable or disable to execute a program when a CD-ROM is inserted. If Auto Insert Notification is enabled, as is by default, arbitrary code can be executed when a CD-ROM is inserted. The auto insert notification is set up by the Windows 95 OS, and is not a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up. To clarify this aspect of the invention, independent claims 1, 13, and 25 have been amended.

The Examiner further states that Wydall discloses detecting insertion of a medium into a drive based on the mode (Final Office Action, page 3, item 6). Applicants respectfully disagree. Wydall merely discloses that the Windows 95 OS has an AutoPlay feature which allows the OS to automatically operate a CD-ROM. "Automatically operate" a CD-ROM is not the same as "detecting insertion of a medium into a drive". Furthermore, since the Windows "automatically" operates a CD-ROM, it cannot detect insertion of a medium based on the mode word.

2. Claims 2 and 14 are being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall and further in view of non-patent material message-ID <marnoldDzIG2w.MqJ@netcom.com> submitted by Matt Arnold to newsgroup comp.os.mswindows.programmer.misc ("Arnold").

Wydall and Arnold does not disclose, suggest, or render obvious (1) configuring a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up, (2) detecting insertion of a medium into a drive based on the mode word, (3) starting a program on the medium when the insertion is detected, and (4) configuring the mode word in one of first, second, third, and fourth modes.

Arnold discloses modifying a registry key. A registry key in the Windows 95 registry may be modified to allow the shell to use AutoPlay on any media (Arnold, page 1, last paragraph). The key consists of four bytes. The first byte is a bitmask defining which drive types should be autorun (Arnold, page 2, second paragraph). The drive types include: DRIVE_UNKNOWN, DRIVE_NO_ROOT_DIR, DRIVE_REMOVABLE, DRIVE_FIXED, DRIVE_REMOVE, DRIVE_CDROM, DRIVE_RAMDISK (Arnold, page 2, third paragraph). Arnold merely discloses setting a bit in the bitmask would prevent user from using Autoplay with the corresponding drive type (Arnold, page 2, fourth paragraph). This is not the same as configuring the mode word in one of first, second, third, and fourth modes.

In the Final Office Action, the Examiner contends that Applicants' arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited (Final Office Action, page 14, item 60). Applicants respectfully disagree. As argued in the previous response, Arnold merely describes the different drive types. The types DRIVE_REMOVABLE, DRIVE_FIXED, DRIVE_REMOVE, DRIVE_CDROM, DRIVE_RAMDISK refer to the drive types, not the different modes in the mode word on which detecting insertion of a medium is based. Furthermore, the Examiner failed to respond to Applicants' argument that Arnold merely discloses setting a bit in the bitmask would prevent user from using Autoplay with the corresponding drive type (Arnold, page 2, fourth paragraph), not configuring the mode word in one of first, second, third, and fourth modes.

Where a claim is refused for any reason relating to the merits thereof it should be "rejected" and the ground of rejection fully and clearly stated. See MPEP 707.07(d). Where the applicant traverses an objection, the Examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it. See MPEP 707.07(f). An omnibus rejection of the claim "on the reference and for reasons of record" is stereotyped and usually not

informative and should therefore be avoided. See MPEP 707.07(d). It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply. See MPEP 706.02(j).

The Examiner should set forth in the Office Action the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate. See MPEP 706.02(j). The goal of examination is to clearly articulate any rejection early in the prosecution process so that the applicant has the opportunity to provide evidence of a patentability and otherwise reply completely at the earliest opportunity. See MPEP 706.

The Examiner repeated the rejection without taking note of the Applicants' arguments and without answering the substance of Applicants' arguments as presented in the previously filed response. The MPEP requires that the Examiner's action will be complete as to all matters. 37 CRF 1.104; MPEP 707.07. Since the Examiner's action in the Office Action is incomplete in that there is no answer to the substance of Applicants' arguments previously presented, the rejections have been improperly made.

3. Claims 3 and 15 are being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall and further in view of non-patent material message-ID <01 bda103$140c82c0$4ffk4ecl@pluto> submitted by Homecooking to newsgroup comp.publish.cdrom.hardware ("Homecooking").

Wydall and Homecooking, taken alone or in combination, do not disclose, suggest, or render obvious: (1) configuring a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up, (2) detecting insertion of a medium into a drive based on the mode word, (3) starting a program on the medium when the insertion is detected, and (4) detecting the insertion comprising periodically polling the drive when the mode word is configured in the first mode.

Wydall does not disclose, suggest, or render obvious (1), (2), and (3) as discussed above.

Homecooking merely discloses that if the user enables auto-insert notification, Windows will query the drive to see if there is a new media inserted into the drive in order to refresh the data displayed. Homecooking does not disclose or suggest periodically polling the drive when

the mode word is configured in the first mode. Querying the drive does not mean periodically polling. Windows queries the drive only when the user enables auto-insert notification. Therefore, there is no periodicity. Furthermore, the query is not done when the mode word is configured in the first mode. It is only done if there is a new media inserted into the drive.

In the Final Office Action, the Examiner contends that Applicants appear to assert that the user has to re-enable the auto-insert notification every single time a query of the drive is intended (Final Office Action, page 14, item 61). Applicants do not understand how this argument is relevant. As argued in the previous response, Homecooking discloses that if the user enables auto-insert notification, Windows will query the drive. Hoomecooking does not disclose that if the user enables auto-insert notification, Windows will periodically poll the drive, which is what the claim recites. It is the Examiner's burden to prove that (1) "user enabling auto-insert notification" is equivalent to "configuring the mode word in the first mode", and (2) "Windows will query the drive" is equivalent to "periodically poll the drive".

The Examiner further contends that Applicants appear to interpret "auto-insert notification" differently from one with ordinary skill in the art familiar with Windows. However, the Examiner has not shown how Applicants' simple argument that "doing something is not the same as periodically doing something" amounts to a different interpretation of the auto-insert notification feature in Windows.

Regarding the Examiner's assertion that there cannot be an interruption while burning a disk, Applicants do not see how this assertion is relevant to the claim reciting "periodically polling the drive when the mode word is configured in the first mode." Homecooking was answering to the question why it is necessary to turn off the auto-insert notification. Homecooking essentially said that if the auto-insert notification is turned on, Windows will query the drive and interrupt the burning process; therefore it has to be turned off. Assuming that this explanation is correct (Homecooking is merely a member in a newsgroup and not an authority in Plexwriter), it does not support the assertion that if auto-insert notification is turned on, Windows will periodically query the drive. It does not need periodical interruptions to ruin the burning process, one interruption is enough.

4. Claims 4 and 16 are being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall and Arnold as applied to claims 1, 2 and 13 above and further in view of U.S. Patent No. 5,528,566 issued to McGee et al. ("McGee") and U.S. Patent No. 5,694,606 issued to Pletcher et al. ("Pletcher").

Wydall, Arnold, McGee, and Pletcher, taken alone or in combination, do not disclose, suggest, or render obvious: (1) configuring a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up, (2) detecting insertion of a medium into a drive based on the mode word, (3) starting a program on the medium when the insertion is detected, and (4) detecting the insertion comprising servicing an interrupt indicating the insertion of the medium when the mode is configured in one of the second, third, and fourth modes.

Wydall and Arnold are discussed above. McGee discloses an apparatus for optical disc storage of optical discs and selective access and/or retrieval thereof via pneumatic control. An optical sensor is mounted on each arm of a disc engaging mechanism (McGee, col. 9, lines 63-67; col. 10, lines 1-4) The purpose of the optical sensor is to sense the presence of an optical disc (Mcgee, col. 10, lines 4-5). Therefore, the detection is not based on the mode word. Pletcher discloses a mechanism for using common code to handle hardware interrupts in multiple processor modes. Code is provided for an interrupt handler that may be run in multiple processor modes (Pletcher, col. 4, lines 45-47). The term "processor modes" is meant to include modes such as real mode and protected mode, as well as privilege levels (Pletcher, col. 6, lines 55-57). The processor modes, therefore, are not the mode word that is configured on which the detection of the insertion of the medium is based. The processor modes are not configured in a mode word.

In the Final Office Action, the Examiner contends that one cannot show non-obviousness by attacking references individually when the rejections are based on combinations of references, citing In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) and In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) (Final Office Action, page 15, item 62). Applicants respectfully disagree and contend that the Examiner mis-read Keller and Merck.

Keller and Merck are not applicable in the present instance because the prior art references in Keller and Merck teach, disclose, and suggest the claimed invention. On the

contrary, as Applicants have argued, there is no suggestion, teaching, or disclosure of the above elements in Wydall, Arnold, McGee, and Pletcher.

In Keller, the Examiner rejected claims directed to cardiac pacer apparatus with digital timers basing on two principal prior art references, Keller and Berkovits, and one secondary reference, Walsh. Both Keller and Berkovits relate to cardiac pacer using analog timers while Walsh is relied on only for the teaching of digital timing in a heart stimulator.

The Court affirmed the Board's decision to uphold the Examiner's rejection. Citing In re Winslow, 53 CCPA 1574, 365 F.2d 1017, 151 USPQ 48 (1966), as modified in In re Antle, 58 CCPA 1382, 444 F.2d 1168, 170 USPQ 285 (1971). The Court stated "[b]oth Keller and Berkovits disclose heart stimulators that use R-C type timing circuits. Walsh teaches the use of digital type timing circuits in place of R-C type timing circuits in conventional heart stimulators. Therefore, the question is whether it would have been obvious to one of ordinary skill in the art, working with the Keller and the Berkovits and the Walsh references before him, to do what the inventors herein have done, that is, to use a digital timing circuit in a cardiac pacer". See Keller at 881. The Court rejected the Appellant's argument that the teachings of Walsh cannot be properly combined with those of either Keller or Berkovits because Walsh does not relate to a cardiac pacer. The Court stated "[t]he test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the reference. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art". Citing In re Wood, 599 F.2d 1032, 202 USPQ 171 (CCPA 1979); In re Passal, 57 CCPA 1151, 426 F.2d 828, 165 USPQ 720 (1970); In re Richman, 57 CCPA 1060, 424 F.2d 1388, 165 USPQ 509 (1970); In re Rosselet, 52 CCPA 1533, 347 F.2d 847, 146 USPQ 183 (1965).

The Court also rejected the Appellant's argument that the Board did not accord appropriate weight to an expert's affidavit. The expert's affidavit concerns itself mainly with the question of whether Walsh suggests the use of digital timing in a cardiac pacer. In rejecting this argument, the Court stated "one cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references". Citing In re Young, 56 CCPA 757, 403 F.2d 754, 159 USPQ 725 (1968). See Keller at 882. The Court

further stated that "the test is not whether a suggestion to use digital timing in a cardiac pacer is found in Walsh as applied by the expert, but rather what Keller in view of Walsh and what Berkovits in view of Walsh have suggested to one of ordinary skill in the art." See Keller at 882.

In Merck, the invention is a method of treating human mental disorders involving depression. The method includes orally administering amitriptyline or its nontoxic salts. There are a total of nine prior references. Ray-Bellet disclosed amitriptyline and its hydrochloride salt but did not disclose that amitriptyline possess antidepressive properties. Kuhn disclosed imipramine, a compound having a chemical structure very similar to that of amitriptyline and taught that it was a very effective antidepressant in humans. Kuhn disclosed that imipamine differs from the structure of amitriptyline only in the replacement of the unsaturated carbon dioxide in the center ring with a nitrogen atom. Lehman disclosed results of a study of the effects on imipramine on the symptoms of depression. Freidman disclosed the theory of "isosteric replacements" or "bio-resisteric replacement" as a tool to predict the properties of compounds. Burger discussed the theory of bioisosterism and its usefulness in designing new drugs. Petersen taught the properties of chlorpromazine and chlorprothixene and predicted the similarity in properties using the theory of isosteric replacement. The difference merely involves the nitrogen atom located in the central ring of one compound and an unsaturated carbon atom in the other compound. Roche reports revealed the results from tests comparing the pharmacological properties of amitriptyline and imipramine and concluded that amitriptyline should be tested for depression alleviation because of the structural similarity between amitriptyline and imipramine.

The Court stated that "[i]n view of these teachings which show a similar use (psychotropic drugs) between amitriptyline and imipramine, one of ordinary skill in the medicinal arts, possessed of the knowledge of the investigative techniques used in the field of drug design and pharmacological predictability, would have expected amitriptyline to resemble imipramine in the alleviation of depression in humans". The Court went on to reject the Appellant's argument that the Board's decision was premised on an impermissible "obvious to try" standard. In rejecting the Appellant's arguments that Petersen teaches away from Appellant's decision, the Court stated that "[n]on-obviousness cannot be established by attacking reference individually where the rejection is based upon the teachings of a combination of

reference", citing Keller. The Court stated that "Petersen must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. That teaching is that the interchange of the nitrogen and the unsaturated carbon atoms is isosteric and compounds so modified are expected to possess similar biological properties". See Merck at 380.

Neither Keller nor Merck is appropriate in the instant case. In Keller, the Court rejected the argument that the secondary reference does not suggest its application in the primary reference. The Court reasoned that the obviousness is based on what the primary reference in view of the secondary reference would have suggested, not the reverse. In Merck, the Court rejected the argument that one of the references teaches a different compound. The Court reasoned that this reference is relied on for its teaching of the predicted similarity between two compounds when one element is interchanged with another, not for its teaching of different compound.

5. Claims 5 and 17 are being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall and Arnold as applied to claims 1, 2 and 13 above and further in view of McGee and U.S. Patent No. 5,463,752 issued to Benhase et al. ("Benhase").

Wydall, Arnold, McGee, and Benhase, taken alone or in combination, do not disclose, suggest, or render obvious: (1) configuring a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up, (2) detecting insertion of a medium into a drive based on the mode word, (3) starting a program on the medium when the insertion is detected, (4) detecting the insertion comprising servicing an interrupt indicating the insertion of the medium when the mode is configured in one of the second, third, and fourth modes, and (5) servicing the interrupt generated by a polling circuit in a chipset when the mode is configured in one of the second and third modes, the polling circuit detecting the insertion of the medium.

Wydall, Arnold, McGee are discussed above. McGee merely discloses that the microprocessor periodically polls each read-head modules optical sensor pair (McGee, col. 10, lines 12-15), not a polling circuit in a chipset. Polling by a microprocessor is a software technique. Benhase discloses a method and system for enhancing the efficiency of communication between multiple direct access storage devices and a storage system controller. An independent polling function may be implemented in several ways, for example with a

separate microprocessor (Benhase, col. 4, lines 24-32). A processor reads status registers and the process resets control registers in preparation for the next poll cycle (Benhase, col. 5, lines 21-23).. Benhase merely discloses using a separate microprocessor to implement an independent polling function, not a polling circuit in a chipset. None of McGee and Benhase discloses a polling circuit generated an interrupt. Furthermore, none of Wydall, Arnold, McGee, and Pletcher discloses or suggests servicing the interrupt when the mode is configured in one of the second and third modes.

In the Final Office Action, the Examiner contends that the features upon which applicants rely (i.e., polling not by software technique) are not recited in the rejected claims (Final Office Action, page 15, item 63). Applicants respectfully disagree. The rejected claim DOES recite the feature upon which applicants rely ("servicing the interrupt generated by a polling circuit in a chipset.."). A polling circuit is a hardware device, not a software technique. To support the rejection, it is the Examiner's burden to show that a polling circuit is a software technique.

The Examiner further contends that Applicants' argument that "Benhase merely discloses using a separate microprocessor to implement an independent polling function, not a polling circuit in a chipset" does not comply with 37 CFR 1.111(c) (Final Office Action, page 16, item 64). Applicants respectfully disagree. Applicants' argument clearly distinguishes the claimed invention from Benhase's teaching. A microprocessor implementing an independent polling function is in essence executing a program to poll. This is not the same as a polling circuit in a chipset. A polling circuit in a chipset is a hardware device specifically designed to poll.

6. Claims 8 and 20 are being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall, Arnold, McGee and Pletcher as applied to claims 4 and 13 above and further in view of U.S. Patent No. 5,414,858 issued to Hoffman et al. ("Hoffman").

Wydall, Arnold, McGee, Pletcher, and Hoffman, taken alone or in combination, do not disclose, suggest, or render obvious: (1) configuring a mode word, (2) detecting insertion of a medium into a drive based on the mode word, (3) starting a program on the medium when the insertion is detected, and (4) servicing the interrupt generated by the drive.

Wydall, Arnold, McGee, and Pletcher are discussed above. Hoffman discloses a system and method for dynamically varying between interrupt and polling to service requests of

computer peripherals. The system initiates the interrupt mode and determines the need for transition to a polling mode as defined by a combination of an interrupt count and elapsed time (Hoffman, col. 3, lines 62-66). Hoffman merely discloses transitioning from interrupt to polling. Hoffman does not disclose or suggest servicing the interrupt as part of detecting insertion based on a mode word.

In the Final Office Action, the Examiner states that Applicants are reminded that one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references (Final Office Action, page 16, item 65). However, the Examiner has a burden to show that there is motivation or suggestion to combine. When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to: (A) The claimed invention must be considered as a whole; (B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination; (C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and (D) Reasonable expectation of success is the standard with which obviousness is determined. Hodosh v. Block Drug Col, Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986). When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the Examiner to explain why the combination of the teachings is proper. Ex parte Skinner, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). A statement of a rejection that includes a large number of rejections must explain with reasonable specificity at least one rejection, otherwise the Examiner procedurally fails to establish a prima facie case of obviousness. Ex parte Blanc, 13 USPQ2d 1383 (Bd. Pat. App. & Inter. 1989). The ultimate determination of patentability is based on the entire record, by a preponderance of evidence, with due consideration to the persuasiveness of any arguments and any secondary evidence. In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). Here, the Examiner failed to explain why the combination of the teachings is proper, especially in light of Applicants' arguments.

7. Claim 25 is being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall as applied to claim 1 above and further in view of U.S. Patent No. 6,189,050 issued to Sarkada ("Sakarda").

Wydall and Sakarda, taken alone or in combination, do not disclose, suggest, or render obvious: (1) a processor, (2) a chipset to control a drive, and (3) a memory causing the processor to configure a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up, detect insertion of a medium into the drive, and start a program when the insertion is detected.

Wydall is discussed above. Sakarda discloses a method and apparatus for adding or removing devices from a computer system without restarting. A hard disk couples through device port to Intelligent Device Enabler (IDE) bus. Any devices installed on primary and secondary IDE buses are separately controlled by a PCI/IDE bus controller (Sakarda, col. 5, lines 13-18).. Sakarda merely discloses a PCI/IDE bus controller controls the hard disk which is installed on the primary IDE bus. Sakarda does not disclose or suggest configuring a mode word, detecting insertion of a medium, and starting a program.

In the Final Office Action, the Examiner contends that Applicants fail to address the allegation that Wydall and Sakarda do not disclose, suggest, or render obvious: a processor, a chipset coupled to the processor to control a drive, and a memory coupled to the processor to store instruction code (Final Office Action, pages 16-17, item 66). However, claim 25 does not merely recite "a processor, a chipset coupled to the processor to control a drive, and a memory coupled to the processor to store instruction code." Claim 25 recites these elements and the instruction code causing the processor to configure a mode word in a chipset or in a configuration map stored in a non-volatile memory during boot-up, detect insertion of a medium into the drive, and start a program when the insertion is detected. As argued above, Sakarda merely discloses a PCI/IDE bus controller controls the hard disk which is installed on the primary IDE bus, not configuring a mode word, etc.

8. Claim 26 is being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall and Sakarda as applied to claim 25 above and further in view of Arnold.

Wydall, Sakarda, and Arnold, taken alone or in combination, do not disclose, suggest, or render obvious: (1) a processor, (2) a chipset to control a drive, and (3) a memory causing the processor to configure a mode word, detect insertion of a medium into the drive, and start a

program when the insertion is detected, and (4) the processor to configure the mode word in one of first, second, third, and fourth modes.

Wydall, Sakarda, and Arnold are discussed above. None of them discloses the above elements as argued above.

9. Claim 27 is being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall and Sakarda as applied to claim 25 above and further in view of Homecooking.

Wydall, Sakarda, and Homecooking, taken alone or in combination, do not disclose, suggest, or render obvious: (1) a processor, (2) a chipset to control a drive, and (3) a memory causing the processor to configure a mode word, detect insertion of a medium into the drive, and start a program when the insertion is detected, and (4) periodically poll the drive when the mode word is configured in the first mode.

Wydall, Sakarda, and Homecooking are discussed above.

10. Claim 28 is being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall, Sakarda and Arnold as applied to claims 25 and 26 above and further in view of McGee and Pletcher.

Wydall, Sakarda, Arnold, McGee, and Pletcher, taken alone or in combination, do not disclose, suggest, or render obvious: (1) a processor, (2) a chipset to control a drive, and (3) a memory causing the processor to configure a mode word, detect insertion of a medium into the drive, and start a program when the insertion is detected, and (4) service an interrupt indicating the insertion of the medium when the mode is configured in one of the second, third, and fourth modes.

Wydall, Sakarda, Arnold, McGee, and Pletcher are discussed above.

11. Claim 29 is being rejected under 35 U.S.C. §103(a) as being unpatentable over Wydall, Sakarda and Arnold as applied to claims 25 and 26 above and further in view of McGee and Benhase.

Wydall, Sakarda, Arnold, McGee, and Benhase, taken alone or in combination, do not disclose, suggest, or render obvious: (1) a processor, (2) a chipset to control a drive, and (3) a memory causing the processor to configure a mode word, detect insertion of a medium into the

drive, and start a program when the insertion is detected, and (4) service the interrupt generated by a polling circuit in the chipset when the mode is configured in one of the second and third modes, the polling circuit detecting the insertion of the medium.

Wydall, Sakarda, Arnold, McGee, and Benhase are discussed above.

The Examiner failed to establish a prima facie case of obviousness and failed to show there is teaching, suggestion or motivation to combine the references. "When determining the patentability of a claimed invention which combined two known elements, 'the question is whether there is something in the prior art as a whole suggest the desirability, and thus the obviousness, of making the combination.'" In re Beattie, Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ (BNA) 481, 488 (Fed. Cir. 1984). To defeat patentability based on obviousness, the suggestion to make the new product having the claimed characteristics must come from the prior art, not from the hindsight knowledge of the invention. Interconnect Planning Corp. v. Feil, 744 F.2d 1132, 1143, 227 USPQ (BNA) 543, 551 (Fed. Cir. 1985). To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the Examiner to show a motivation to combine the references that create the case of obviousness. In other words, the Examiner must show reasons that a skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the prior elements from the cited prior references for combination in the manner claimed. In re Rouffet, 149 F.3d 1350 (Fed. Cir. 1996), 47 USPQ 2d (BNA) 1453. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or implicitly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPQ 972, 973. (Bd.Pat.App.&Inter. 1985). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." In re Mills 916 F.2d at 682, 16 USPQ2d at 1432; In re Fitch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992).

Here, the Examiner failed to show that the cited prior art references suggest the combination. None of Wydall, Sakarda, Homecooking, Arnold, McGee, Pletcher, Hoffman and Benhase suggests the combination.

Therefore, Applicants believe that independent claims 1, 9, 13, 21, 25, 31 and their respective dependent claims are distinguishable over the cited prior art references. Accordingly, Applicants respectfully request the rejection under 35 U.S.C. §103(a) be withdrawn.

Allowable Subject Matter

1. Applicants note with appreciation the Examiner's indication of allowable subject matter. The Examiner objects to claims 6-7, 18-19, and 30 as being dependent on a rejected base claim, but indicates that the claims would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, in light of the above amendments and remarks, Applicants respectfully request the objections to claims 6-7, 18-19, and 30 be withdrawn.

Conclusion

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: May 27, 2005 By

Thinh V. Nguyen
Reg. No. 42,034
Tel.: (714) 557-3800 (Pacific Coast)

12400 Wilshire Boulevard, Seventh Floor
Los Angeles, California 90025

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8A)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

☐ *deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450.*

Date: 05/27/2005

FACSIMILE

☑ *transmitted by facsimile to the Patent and Trademark Office.*

Tu Nguyen 05/27/2005 *Date*